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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,333	10/30/2003	Steven A. Mestemacher	AD6927USNA	2534

23906 7590 10/19/2005

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
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EXAMINER	
HOOK, JAMES F	

ART UNIT	PAPER NUMBER
3754	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

E

Office Action Summary	Application No.	Applicant(s)	
	10/699,333	MESTEMACHER, STEVEN A.	
	Examiner	Art Unit	
	James F. Hook	3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, 10-13, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Subramanian. The patent to Subramanian discloses the recited pipe, sheet, or tube where the use of such with oil or gas is merely intended use, where the article of Subramanian is capable of use with these materials, comprising at least one polyolefin, at least one polyamide incompatible with the polyolefin, and at least one alkylcarboxyl substituted polyolefinic compatibilizer where the polyolefins are in a continuous matrix phase and the polyamides are present in discontinuous distributed phase in the form of a multitude of thin, substantially parallel and overlapping layers of material embedded in the continuous phase and further where the compatibilizer is stated as being provided throughout the structure which inherently would include between layers, the polyolefin used are polyethylene, polypropylene or polybutylene, the alkylcarboxyl substituted compatibilizer is selected from polyolefins that have carboxylic moieties attached to a polyolefin backbone or chains, the polyamide can be chosen from many of those listed in claim 4, the distributed phase in the range set forth in claim 6, due to the fact that the same polyamides are used as applicant's claims, and there is no recitation of additives to change the melting point of polyamides, the

temperatures of claims 10 and 11 are considered inherent to the material, the amounts of polyamide, polyolefin, and compatibilizer used are within the ranges set forth in claim 12, dicarboxylic acids can be used to graft to the polyolefin, the pipe can be a flexible pipe as such is inherent to the materials used, and the use of such for a line pipe or casing liner are merely intended use where the structure is capable of use in these fields as well.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Subramanian in view of Chen (043). The patent to Subramanian discloses all of the recited structure with the exception of using amorphous aromatic polyamides, and providing additives such as a lubricant and a stabilizer. The patent to Chen discloses that it is old and well known in the art to use various types of polyamides including amorphous aromatic polyamides in combination with a polyolefin to create a laminar article, where further additives such as lubricants and stabilizers can also be provided to increase the adhering of the two materials to one another and improve the overall make up of the material for further forming. It would have been obvious to one skilled in the art to modify the polyamide in Subramanian by substituting an aromatic amorphous polyamide where such are known equivalent forms of polyamides used in combination

with polyolefins, and to provide stabilizers and lubricants to increase the workability of the material and help them adhere better as suggested by Chen, where such would provide a product less apt to premature failure thereby saving money.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Subramanian in view of Mehra (513). The patent to Subramanian discloses all of the recited structure with the exception of using a plasticizer. The patent to Mehra discloses that it is old and well known in the art to use various types of additives in combination with a polyolefins and polyamides to create a laminar article, additives such as plasticizers can also be provided to increase the adhering of the two materials to one another and improve the overall make up of the material for further forming. It would have been obvious to one skilled in the art to modify the polyamide in Subramanian by providing placticizer to increase the workability of the material and help them adhere better as suggested by Mehra, where such would provide a product less apt to premature failure thereby saving money.

Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Subramanian in view of Jung (833). The patent to Subramanian discloses all of the recited structure with the exception of using a cross linked polyolefin such as polyethylene where such is cross linked using silane. The patent to Jung discloses a similar material made up of layers of polyamide dispersed in a polyolefin matrix where the polyolefins used can be normal polyolefins or cross linked polyolefins such as polyethylene, where the use of silane is old and well known in the art as a cross linking agent and an obvious choice of mechanical expedients. It would have been obvious to

one skilled in the art to modify the polyolefin in Subramanian to be formed of a cross linked polyolefin such as polyethylene where the use of silane is an obvious choice of mechanical expedients, and as such is an equivalent form of polyolefin used to form such materials as suggested by Jung where such would provide for better adherence of the polyamide to the polyolefin thereby improving quality and preventing premature failure thereby saving money.

Response to Arguments

Applicant's arguments filed July 22, 2005 have been fully considered but they are not persuasive. With respect to the arguments directed at Subramanian, in column 2, lines 25-29, the use of the material to form films, filaments, sheets, containers, tubing and other shaped articles is recited, therefore the argument that it is not taught to form pipes or liners is not persuasive where tubing is one such use for the material in Subramanian, as is sheets and films which are routinely used to form liners, where such is also merely intended use, therefore such is not a persuasive argument. With respect to the inherency, the material set forth in Subramanian is the same as is set forth in the claim language and without additional additives in the claim language which would alter the material to make it flexible, then it is considered inherent that the same material recited in Subramanian for forming tubing would be flexible, also it should be noted that with no degree of flexibility recited, most materials exhibit some flexibility, and with bottles being described in the example which are known to the public to be flexible it is considered inherent that the material in Subramanian is flexible. With respect to the

combinations of Chen and Mehra with Subramanian such do not offer any further argument other than the arguments presented against Subramanian and therefore are not providing any further arguments to be discussed. With respect to the argument directed to Jung not teaching cross linking, such is not persuasive when Jung teaches in column 4, lines 15-21 suggests that cross linking is kept down, however, does set forth that cross linking occurs in the polyolefin, and without a specific amount of cross linking suggested in the claims, it is considered that Jung teaches that the polyolefins used can be cross linked which meets the claim language, and also in the recited section set forth in the arguments from column 5 of Jung it still teaches that there is an amount of cross linking that occurs due to the initiator and even though such is kept to a minimum cross linking still occurs and is present in the polyolefin, therefore the argument that Jung teaches away from cross linked polyolefins is not persuasive.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to McCord, Mason, Booze, and Mehra disclosing state of the art melt mixed materials.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (571) 272-4906. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James F. Hook
Primary Examiner
Art Unit 3754

JFH